Teaching XLIFF to translators and localisers

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Abstract
The XML Localisation Interchange File Format (XLIFF) is the main standard for the interchange of localisation data during the localisation process and the most popular and widely used in the industry. Computer Assisted Translation (CAT) tools already support its version 1.2. However, the most important end users of the format, i.e. translators, still have limited or no knowledge about the standard and the possible advantages of its adoption (Anastasiou 2010). With a view to bridging this knowledge gap, we have been introducing XLIFF as a topic of study in the translation and localisation studies curricula for the last four years in four different European universities, both at undergraduate and postgraduate levels, thus satisfying one of the missions of the Promotion and Liaison OASIS XLIFF subcommittee. In this paper, we aim at sharing our experience in teaching XLIFF to translation and localisation students: the curriculum design, the topics covered, the practical exercises and the areas that we have improved and modified based on our experience over this period of time.

Keywords: *XLIFF, Teaching, Translation studies, localisation*

1. Introduction

The XML Interchange File Format (XLIFF) is a tool-neutral standard that was conceived to allow for the interchange of localisable information during the localisation process. It was devised in Dublin in September 2000 by members of Novel, Oracle and Sun Microsystems. One year later, the first draft of XLIFF 1.0 was published; and in 2002 it was officially approved as an OASIS Committee Specification (Jewtushenko 2005). Since then, three more versions have been approved (1.1 in 2003, 1.2 in 2008 and 2.0 in 2014) and the standard has been widely adopted by the software and localisation industry, particularly over the past five years.

The advantages offered by the XLIFF format can be classified depending on the different agents involved in the localisation process: localisation customer, tool vendor and service provider (OASIS XLIFF 2007, pp.6-8). Translators would fit into the latter category; for them, XLIFF represents:

a) *a tool-independent file format* (OASIS XLIFF 2007, p.8): this could be the most important advantage for translators, as it gives them the freedom to choose their preferred CAT (Computer-Assisted Translation) tool, reinforced by the fact that XLIFF version 1.2 is a widely-supported format in the CAT tool ecosystem (Filip and Morado 2013);

b) *a standardised file format* (OASIS XLIFF 2007, p.8), which could help translators to concentrate on mastering and understanding the structure of one standardised, well-established format instead of several proprietary specific ones. This advantage was also addressed by García (2006, p.18) when he stated that the use of XLIFF for freelancers could mean their way back to working on the text, rather than worrying about formatting issues;

c) *a possibility to incorporate the standard file format in the vendor's workflow* (OASIS XLIFF 2007, p.8). Some CMS already allow users to extract the translatable text of their web sites in XLIFF format and reimport it to the system once the translation has been completed (Torres del Rey & Rodríguez V. de Aldana 2013);

d) *an open standard* (OASIS XLIFF 2007, p.8): the development process of XLIFF is completely transparent and all the documents produced by the OASIS XLIFF Technical Committee are available for public

consultation. Moreover, the composition of the Technical Committee itself –with members coming from software companies, tool vendors, service providers, associations and academia– (Filip 2012, p.33) guarantees that the needs of all agents implied in the localisation process are taken into account;

e) *the advantages of XML* (OASIS XLIFF 2007, p.8): being XML-based, XLIFF represents a format that can be easily handled and modified by translators. Most web browsers can display well-formed XML documents (such as an XLIFF file); moreover, XML files can be opened and modified without the need of specific advanced software: a simple text editor such as Notepad (in a Windows based system) can be used.

It is clear from the above-mentioned advantages that translators can benefit from the standard in numerous ways. In a localisation or translation process, translators are the last of a series of agents having to deal with the standard. However, they are still not very familiar with it (Anastasiou 2010, Morado Vázquez 2012, p.155). All these reasons have compelled us to create a teaching module on XLIFF to familiarise translation and localisation students with the standard and to make them better equipped for their professional practice.

Knowledge is power. Without knowing the benefits that the standard can provide them, they will not be able to make the most of it in the future professional careers and they will never be able to claim their rights to tool independency, active participation in the workflow, accessing whole, non-fragmentary information about the content and process included in the interchange documents, contributing to the possibilities of the standard, and so on. Moreover, it is also possible that the people in charge of distributing the files to be translated within a company (i.e. project managers) are not aware of the benefits and advantages that the use of XLIFF can imply.

This paper covers our experience in teaching XLIFF to translation and localisation students and is structured as follows: in section 2 we state the rationale that led us to this choice of content for translation and localisation trainees. In section 3, we include the initial considerations that were taken into account when designing the module, followed in Section 4 with our teaching methodology. Section 5 contains a detailed description of the latest iteration of our XLIFF module taught at the Autonomous University of Barcelona. We end up this paper with a summary of the lessons learnt during our teaching practice and the future work that we intend to implement on the subject.

2. Rationale

Our main objective as knowledge facilitators is to empower our students. We want them to be in control of the process and resources that they manipulate in order to carry out a job in a way that is satisfactory to them in professional terms and gives value to society. Being in control means, in a practical sense, that they should understand the files that they need to handle and the processes that they are involved in. Accordingly, in-depth knowledge should be provided to give them the necessary means to confront typical as well as unforeseen circumstances during real situations in their future professional career.

Knowing how to use and process different file formats has been identified as one of the main localisation elements that should be included in the curriculum for translators (O'Hagan 2006, p.41). In addition to this, the first author of this paper has been involved in the OASIS XLIFF Technical Committee and in the OASIS XLIFF Promotion and Liaison (P&L) Subcommittee for the last six years, the latter focusing on the promotion of the standard within the localisation field. Both authors have also been involved in the organisation of the yearly symposia on XLIFF coordinated by the OASIS XLIFF TC and the P&L Subcommittee since 2010. Therefore, it seemed logical to us as localisation lecturers to help to spread our knowledge about the standard among the new generation of translators. The XLIFF module was first implemented in the year 2010 and since then it has been taught in different European universities. The module has been adapted and has evolved, taking into account the profile of the trainees and the feedback received from previous experiences.

3. Initial considerations

The first iteration of the module was a request made to the first author of this article in the year 2010. While conducting her PhD research she was part of a research group within the Localisation Research Centre at the University of Limerick. At that time she was already a member of the XLIFF TC and the director of the centre asked her to prepare a seminar on XLIFF to the rest of their colleagues. The seminar, that took place in early 2010, was also attended by postgraduate students pursuing the MA in Global

Computing and Localisation. The module was divided into a theoretical component (history of XLIFF, XLIFF usage, advantages, CAT tool support, XLIFF validator) and a practical component (the creation of an XLIFF file to familiarise participants with its syntax and a file inspection questionnaire). The result of that experience was very positive and it encouraged her to adapt it in the future in localisation-related courses as part of various official curricula elsewhere.

Since that constructive experience, the XLIFF module has been included: in the curriculum of an undergraduate course on localisation at the University of Salamanca, Spain, coordinated by the second author of this article, and who is now responsible for its adaptation and teaching at that institution; as one of the modules of a postgraduate course on localisation and project management at the University of Geneva, Switzerland; as one of the modules of a postgraduate course on XML and multilingual documents at the University of Geneva, Switzerland; and as a standalone standards seminar, that belongs to one of the three taught units that form the MA in *Tradumàtica* (Translation Automation or Translation and Computers) at the Autonomous University of Barcelona, Spain. All the above-mentioned courses are Localisation-related courses taught at Translation faculties. It should be noted that the LRC, where the first iteration of the module took place, is based at the Computer Science Department and Information Systems of the Faculty of Science and Engineering at the University of Limerick. Including the XLIFF syllabus in a Localisation-related module (whether this is located at a Computer Science or a Translation department) fit perfectly well in the already existing curriculum.

We always make the design of our XLIFF module pivot around two main axes: the previous technical background of the students, and the level of specialised knowledge that they need to acquire. On the first axis, we gather information beforehand about the students' experience in technical aspects of text formats, mainly of mark-up languages. During the first iterations of the XLIFF module, we realised that most of the problems that students faced were not directly related to XLIFF itself but to their lack of knowledge on XML basic concepts. Therefore, we decided to tackle that constraint by adding extra tutorials and practical exercises on XML prior to the introduction of XLIFF.

The second axis is determined by the maturity of the students and the level of specialisation of their degree. We take these factors into account because students pursuing an undergraduate diploma in translation might not need or may not be prepared to assimilate in-depth technical concepts, while this might not be be the case for postgraduate students in Localisation or Translation Technology Master's degrees.

4. Teaching methodology

The general objective of our module is to help students obtain good conceptual and practical knowledge of the XLIFF standard and other related localisation standards. The more specific objectives are: learning XML basic concepts; understanding the importance of the use of localisation standards during the localisation process; learning about the history and development of standards of localisation; learning how to manipulate some basic aspects of the various interchange file formats in localisation; getting in-depth knowledge of the XLIFF standard: main elements, attributes and most important uses; learning about similar standards used in the Open Source environment (GETTEXT system and the manipulation of PO files).

In our module, we introduce theoretical components followed by practical activities aimed at mutually reinforcing the theoretical concepts and the technical skills required to understand and manipulate XLIFF files: in the end, the nature, the mechanics and, why not, the aesthetics of the standard need to be assimilated synergistically (Torres del Rey 2005a, pp.171-186). Mixing those components is currently successful practice in the design of translation technology-related courses (Doherty *et al*. 2012, Doherty and Moorkens 2013, O'Brien 2002, Starlander and Morado Vázquez 2013) and it has been suggested as a good strategy in the design of XML-related courses to translators (Suttleworth in Núñez Piñeiro 2006, p.64).

The module always takes place in a computer room where both the lecturer and the students have access to the necessary tools to fulfil their tasks. The rationale and aims of the XLIFF module are always indicated in the first lesson to attract students' attention and make them aware of the importance of the knowledge that they are going to acquire. This information has been appreciated by students in similar courses (Doherty and Moorkens 2013, p.130).

In general, we always try to adopt what we have labelled the ECOS (Spanish acronym standing for Communicative, Object-oriented, Social) Approach

for a comprehensive, humanistic, "multiscopic" (i.e. from different perspectives) learning experience (Torres del Rey *et al*. 2014; Torres del Rey 2003; 2005a, 171ff; 2005b) – i.e. by stressing technical, *object*-oriented aspects that students must comprehend and experience visually, "manually" and proactively for better assimilation; by understanding how the standard can *communicate* information, structure, functionality, meaning; and by helping the localiser, through both the communicative and the object-oriented aspect, gain a strong foothold in the multi-disciplinary *socio*-professional circle (and process) they work in, while promoting *social* initiatives like standardisation and open knowledge.

5. Structure of the module

The latest and most detailed iteration of our module was created in the form of a seminar taught at the Autonomous University of Barcelona. The seminar was part of the second unit (web, multimedia and videogame localisation) of the MA in *Tradumàtica*. It consisted of an 8-hour course distributed in two days; lessons (mixing theoretical and practical components) were divided in two-hour periods with a short break (15mts) in between. It took place in the third week of February 2014. In this section we describe the four sections of that module at both the theoretical and practical level: Introduction to XML, Standards of localisation, XLIFF, and Open Source Localisation Standards.

Introduction to XML

As mentioned before, some of the problems that our students encountered in previous years during the XLIFF module were related to their lack of knowledge of basic concepts of XML. To avoid that problem we decided to include an introductory course on XML prior to the main lesson on standards and XLIFF. XML had already been identified as a topic that deserves its place within the localisation curriculum (Drouin 2006, p.51), and the need for adding XML and other formatting and exchange mechanisms to the translation curriculum has been mentioned by localisation scholars (Wright in Núñez Piñeiro O. and Mullamaa, K. 2006, p.61; Drouin in Núñez Piñeiro 2006, p.66). We started our introductory course with an overview of XML, its history and its current use in the localisation process. We then introduced the syntax rules and tools needed to modify it and render it.

For the practical session, three exercises were created to introduce our students to XML:

1 Creation of an XML file. After the first session on XML, we asked our students to create their own XML language in order to define the rates of a translation company. In this exercise they had to put what they had learnt about the syntax of XML into practice. They were asked to use an XML editor for the first time.
2 Fixing XML syntax errors. Once the previous exercise was completed, we introduced a second activity where we distributed several XML files containing different syntax errors. Using the XML editor debug functionality trainees had to try to fix the corrupted XML files.
3 Creating a filter in a CAT tool to translate an XML file. In the third exercise on XML, we presented our students with a simulated translation case scenario, where an XML file contained the text of the user interface (UI) of a software application that they needed to localise. We handed over an XML file that contained some translatable text. Their task consisted of creating an *ad hoc* filter in a CAT tool (SDL Trados Studio 2011)[1] that extracted the translatable text and protected the rest of the code. In that particular exercise we gave our students an XML file that contained the UI text strings of Notepad++ (an open source advanced text editor). After creating the filter and translating the first section of that file, our students were required to export the semi-translated file and import it back into the code of the program. That last step gave them the possibility of testing the result of their translation directly on the semi-localised software application. Viewing the final result on screen helped them to understand the importance of their work and prevented them from being too focused on the code alone, where the lack of context could lead to the de-humanisation of their activity.

Standards in localisation

This topic helped our students contextualise XLIFF within the localisation standards ecosystem. On the theoretical side, we introduced the following topics: introduction to the concept of standard, standardisation organisations (W3C, OASIS and LISA), W3C ITS, new localisation standardisation initiatives, and the standards developed by the LISA OSCAR group. For the practical session, we prepared an exercise with a TMX file that students had to inspect and divide into two valid files using a

tool of their choice (an XML editor with the validation functionality, an advanced text editor, a CAT tool…).

XLIFF

This section represented the core of our module. We began with an introduction to XLIFF –what it is, what it is made for, the extraction-merging paradigm and the advantages of its use. Then we presented the history of the standard and its different versions through time. We also produced an overview of the development process of the standard within the OASIS XLIFF Technical Committee –how the TC works and the transparency of the development process itself. The current level of support of the standard in CAT tools was also analysed. The new XLIFF 2.0 version was introduced along with the change of paradigm (core and modules) that it proposes. Finally the main elements and attributes of the 1.2 version were presented and discussed.

For the practical session, we conducted a hands-on session to create an XLIFF file manually. This first guided exercise helped us to introduce, one by one, the main elements of an XLIFF 1.2 file (xliff, header, body, note, trans-unit, source, target and trans-unit) along with its main attributes. At the end of the activity, trainees had to validate the file that they had created, using XLIFF Checker[2] (a tool developed by Rodolfo Raya, former secretary of the XLIFF TC).

For the second exercise, students were given an XLIFF file. A quiz with questions about that specific file followed, where students had to answer questions such as "What is the XLIFF version? What is the data type of the original file? Is the skeleton embedded? What are the source and target languages?..." As can be noted, those questions referred to basic information that could be found in that particular XLIFF file. This activity helped them to better understand the format and to be prepared for future situations where they would be able to analyse and process the files that they received before starting to translate them.

In the third exercise, students received five corrupted XLIFF files that they had to fix using the tool of their choice. They had to find the bug, create a bug report with it, and fix the code to obtain a valid XLIFF file. This latter activity helped them to acquire a better understanding of the correct XLIFF syntax and to develop their own problem-solving techniques.

Interchange standards in Free and Open Source Localisation

In the last session of the module, we introduced our students to the Open Source (OS) Localisation field. In this area, the most used bi-text interchange file format is not XLIFF but Portable Object (PO) (Frimannsson and Hogan 2005, p.9). After a brief introduction to the field pf Free and Open Source Software (FOSS), we explained the mechanism of the GETTEXT system and PO files. The syntax of PO files was widely discussed and the tools needed to modify this format were also presented.

For the practical session, and in an attempt to turn the last session of our seminar into an entertaining activity, we used a modified version of the OS game (SuperTuxKart[3]). In that modified version, we had included some errors in the Spanish translation of the UI through the PO file (which contained the UI text strings). Students had to find the errors while playing the game and filled a bug report with them. After

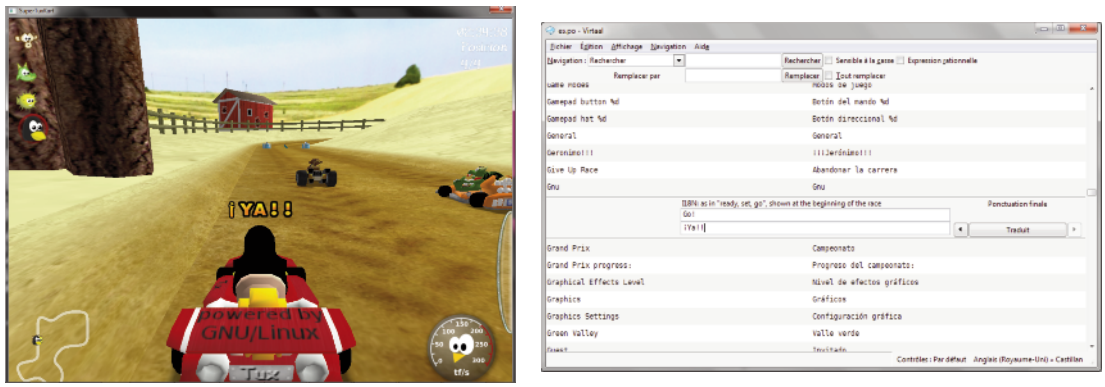

Figure 1: STK user interface with the included errors (left). PO file in Virtaal containing the UI text strings (right)**.**

finding a minimum number of errors, students were asked to edit the PO file to fix the errors using an OS CAT tool (Virtaal was present in the computer lab facilities) or an advanced text editor. Students could actually see the changes on the running game itself after modifying the PO file, which gave them an overview of the process and the result of their work on screen. We firmly believe that in a localisation course it is important that students can get a final view of their work in order to have a clear panoramic view of the whole process, and to become physically and emotionally involved with the concepts and objects being studied so that they can be meaningfully assimilated by the students (Torres del Rey 2005b, pp.533-534; 2005a, pp.181-183 and 196-198). Although some tasks might be done without context, at the end of the procedure the context is recovered and the final product is localised.

This last lesson can deserve a module of its own and it might be taught in relation with XLIFF or independently as a standalone unit. We have decided to include it as part of the XLIFF module to show a similar de-facto standard that is widely used in the FOSS localisation area (Wolff 2011).

In a nutshell, our module was composed of five different topics, with XLIFF being the core one. Despite representing a highly technical module, where students were forced to work mainly with code and little context, we attracted their interest by trying to represent, when possible, quasi-complete localisation processes. In those cases, the result of their code manipulations was implemented in a final localisation product. This "whole-process" strategy allowed us to give a sense of "meaning and purpose" to the task that they carried out and to contextualise their work better, as well as to place localisers in a potentially better situation, socio-professionally speaking, when having to deal with other team members from different disciplines. The de-contextualisation of the process is an inherent characteristic of the localisation process, where several agents and tools are involved at several stages to obtain the final product (Pym 2013). In fact, the XLIFF paradigm (extracting the localisable content, placing it into a XLIFF file and merging it back into the original format upon the completion of the localisation process) is a de-contextualisation process in itself. In order to tackle this "human" problem, we design activities that present a whole process with a final localised product so that our trainees understand each of the tasks as separated pieces of a bigger puzzle, which is the localisation process.

Topic	Main contents	Exercises	Tools used
XML	XML overview and basic concepts	Creation of a XML file	Exchanger XML Editor
	XML and localisation	Fixing XML syntax errors	Exchanger XML Editor
	Filters for XML	Creation of a XML filter in a CAT tool	SDL Trados 2011 Notepad++
Localisation standards	Concept of standard Standardisation organisations New localisation standardisation initiatives LISA OSCAR standards W3C ITS	Division of a TMX file	The tool of their choice.
XLIFF	XLIFF history and development Advantages Extraction-merge paradigm XLIFF support in CAT tools	Creation of an XLIFF file	Notepad++ and XLIFF Checker.
	XLIFF 2.0	Inspection of an XLIFF file and quiz	Notepad++ and a CAT tool of their choice
	XLIFF 1.2 syntax	Fixing corrupted XLIFF files	Any tool of their choice
Standards in FOSS localisation	Introduction to Open Source Localisation The GETTEXT system PO format	Linguistic QA testing of a game and error fixing	Virtaal SuperTuxKart Notepad++

Table 1: Overview of the XLIFF module taught at the Autonomous University of Barcelona

Students' feedback

A questionnaire to obtain students' feedback was distributed to students after each of the seminars and courses that were part of the MA in *Tradumàtica*[4]. Eighteen students answered the questionnaire related to the XLIFF seminar. Trainees gave an average score of 9.3 over 10 in the general appreciation category. They also declared that the learning process was adequate 18/18, the seminar contents fulfilled their expectations 18/18, the objectives of the seminar were achieved (17/18 yes, 1/18 partially), the materials of the seminar were adequate 18/18, and that the difficulty level was adequate 18/18. In the last questions, students were asked if they thought that they could apply the acquired knowledge to their professional life, 17 students answered "yes" and one student "I don't know".

In the same feedback questionnaire, an open question was left for additional comments. Here, three of the students stated that the seminar contained too much information for such short period of time:

> Student1: *I think this seminar should be taught earlier and it should have more hours, as* ***we have seen a lot of topics in a short period of time***[5]*. Moreover, what we have learnt is basic to understand how to create filters or fix hidden files, it would be better to know how to do that earlier.*
>
> Student2: *Maybe* ***it was too much information in a short period of time****. However, the practical exercises were very interesting and they helped us to better understand how a standard like XLIFF works.*
>
> Student3: ***The seminar was too "compressed"****. We should have had some more lessons on the topic.*

The "overcondensed information" issue could be attributed to the organisation of the MA itself. The eight-hour seminar was carried out during two afternoons (Tuesday and Wednesday from 4pm to 8pm). Such a timetable probably did not leave time for a calm digestion of the concepts; neither did it allow students time to finish their exercise as homework before the following practical task. It would have been better to have the seminar distributed in a longer period of time, with a maximum of two-hour sessions per day, ideally with two sessions per week. Two of those students even required more teaching hours on the subject and one of them would have preferred the module to be taught earlier. On the other hand, it was clear from the feedback that the module was perceived as a positive asset to their learning process and they could see the knowledge acquired as a component that could be useful on their professional career.

6. Lessons learnt and future directions

During the last years we have learnt to adapt our teaching approaches to the different student backgrounds. We have also modified our course contents according to the analysis of the difficulties encountered by our students and their own feedback in the form of questionnaires. In this last section we present some lessons learnt and some directions for future work.

6.1 Lessons learnt

A combination of theoretical and practical components is useful

The combination of master lessons with practical exercises has proved to be a successful teaching strategy to transfer XLIFF knowledge. However, there are two factors that need to be taken into account when undertaking practical exercises and hands-on sessions: the number of students and the periodicity of the lessons. We have seen during our different iterations that there is a direct and positive relation between a small group of students and the fluency of practical lessons: there are fewer possibilities of interruption and more time to answer students' questions. Having a teaching assistant in place during those lessons has also proved to be of great help. The periodicity of the lessons should also be taken in consideration: having a seminar of 8 hours in only two days on the topic is totally feasible, but it risks becoming too condensed and it does not allow for a serene assimilation of the proposed concepts. Extending the teaching hours during a longer period of time would allow students to repeat the practical exercises at home and finish them if necessary. It would also give them additional time to go over the acquired theoretical notions and practise their technical skills.

A previous XML course is needed

An XLIFF module could be hard to undertake without the prior introduction of other key concepts, i.e. mark-up languages and XML in particular. Needless to say, teaching XLIFF with other related localisation standards (such as TMX or TBX) can be

beneficial for the general understanding of the field by our students. Connecting both concepts is actually a win-win strategy, because learning about XLIFF is learning about XML. The mark-up concepts that are acquired in our module can be transferred to other XML languages, and the tools that we use during our exercises could be used in the future by our students when dealing with other related formats (i.e. creation of ad-hoc filters for CAT tools, use of tools such as XML editors and validators, advanced text editors, etc.).

The module should be placed at the end of the course/semester

Following on from the same idea that previous technical knowledge is required to assimilate the course successfully, we believe that a module on XLIFF should be planned as part of a localisation-related course and it should be introduced once other, more basic, technical concepts and practical skills have been acquired by students. CAT tool knowledge, for example, is taken for granted in our module. In fact, one of the exercises proposed (creating an *ad hoc* filter for a specific XML format) can be categorised as an advanced use of a CAT tool. In that particular case, command of the basic functionalities of a CAT tool (creation of a project, addition of a TM…) was assumed.

It is essential to adapt the course pace and content to students' needs

Students' different technological backgrounds are in fact one of the main difficulties that a localisation facilitator encounters when designing and teaching a localisation course (Quirion 2003, p.550). Students following localisation courses have different backgrounds and interests and we normally find different levels of computer literacy within the same group of students. This reality forces us to adapt our expectations about outcomes to each year's students as well as to adapt the pace of the course to strike a balance between high-skilled students and lower-skilled ones. The module on XLIFF could be categorised as one of the most advanced modules that our localisation courses contain, and as seen in the previous paragraph it should be ideally placed at the end of the semester, giving students time to adapt to and be familiar with raw code situations, advanced localisation tools and text editors, as well as mark-up languages.

Contextualised practical exercises help to assimilate the concepts

As Pym (2013) points out "[i]n its very nature, the localization project requires a significant division of labor". It is easy, therefore, to be "de-contextualised" and task-centred. During our practical exercises we try to tackle this issue by proposing activities where the final product can be achieved. In that sense, our trainees benefit from the view of the overall process and they are not kept within isolated stages of the process.

6.2 Future directions

The introduction of XLIFF 2.0 as the core of our course depends on its adoption by the localisation industry.

The new version has been approved in August 2014 and it has already been implemented in some CAT tools and prototypes (Morado and Filip 2014). We have included an introduction to this new version in the last iteration of our module, and we have planned to have a more detailed one in its future editions. However, we would like to maintain our activities on the 1.2 version until the new version will be completely established and supported by the main stakeholders of the localisation industry.

Based on our teaching experiences during these years, we have also envisaged the creation of a manual that contains our lessons with theory and practical exercises. With a few exceptions, the existing documentation on XLIFF is scarce and it is either too technical (as the TC specifications) or too commercially oriented (mainly case and pilot studies presented at conferences and symposia). In fact, creating and adapting theoretical material for students was the main challenge that we had to face when designing the XLIFF module. The publication of such a manual could benefit not only students, but also localisation lecturers who wish to implement a standard module in their courses.

As mentioned, the widespread use of standards –and XLIFF in particular– gives translators the freedom to work with the tool of their choice, which we consider their main advantage towards translators and localisers. Therefore we firmly believe that knowledge of XLIFF, its importance and manipulation, should be one of the core competences of a localiser – or translator specialised in translation technologies. We would like to go even further and state that it should be a concept that all translators trainees should acquire before graduating and starting their professional career, as we believe that they will have to deal with this format sooner or later. Consequently, we consider that an XLIFF module

should be part of Localisation and Translation Technologies courses. We have presented in this paper our experience on teaching it and we hope it could inspire others to continue with this educating activity.

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Notes

[1] This exercise was inspired by a similar one conceived by Emilio Rodríguez V. de Aldana, Localisation lecturer at the University of Salamanca, Spain, and a fellow member of the Cod.eX research group.

[2] http://www.maxprograms.com/products/xliffchecker.html

[3] http://supertuxkart.sourceforge.net/

[4] Although this is MA is widely known as "MA in Tradumàtica", its complete and official name in Catalan is *Tradumàtica: Traducció i Localització.* http://pagines.uab.cat/mastertradumatica/

[5] Emphasis added on the three statements.